



US005774662A

# United States Patent [19]

Sakagawa

[11] Patent Number: 5,774,662

[45] Date of Patent: Jun. 30, 1998

[54] SYSTEM FOR SERVER OBTAINING  
TERMINAL ADDRESS VIA SEARCHING  
ADDRESS TABLE OR VIA BROADCASTING  
TO ALL TERMINALS THROUGH  
EXCHANGE IN RESPONSE TO TERMINAL  
ADDRESS INTERROGATION REQUEST

5,440,547 8/1995 Easki et al. .... 370/60  
5,444,702 8/1995 Burnett et al. .... 370/60.1  
5,450,406 9/1995 Esaki et al. .... 370/60.1  
5,506,847 4/1996 Shobatake .... 370/94.3

## FOREIGN PATENT DOCUMENTS

4-1333 11/1992 Japan .

[75] Inventor: Kazuo Sakagawa, Kawasaki, Japan

[73] Assignee: Fujitsu Limited, Kanagawa, Japan

[21] Appl. No.: 446,496

[22] Filed: May 22, 1995

[30] Foreign Application Priority Data

Jul. 5, 1994 [JP] Japan ..... 6-153381

[51] Int. Cl.<sup>6</sup> ..... G06F 12/02

[52] U.S. Cl. .... 395/200.33; 395/412; 395/823

[58] Field of Search ..... 364/200; 340/825.52;  
370/60.1, 60, 94.1, 94.3; 178/2 R; 395/200.33,  
412, 823

[56] References Cited

## U.S. PATENT DOCUMENTS

4,836,317 6/1989 Straussmann ..... 178/2 R  
5,021,943 6/1991 Grimes ..... 364/200  
5,157,390 10/1992 Yoshie et al. .... 340/825.52  
5,278,829 1/1994 Dunlap ..... 370/94.1

Primary Examiner—Thomas C. Lee

Assistant Examiner—David Ton

Attorney, Agent, or Firm—Helfgott &amp; Karas, P.C.

[57] ABSTRACT

A originating terminal sends an ATM address interrogation request to a server if the ATM address of another party's terminal is unknown at the time of communication. Upon receiving the ATM address interrogation request from the terminal, the server refers to an ATM address table, searches the table for an ATM address corresponding to a protocol address contained in the interrogation request and notifies the originating terminal of this ATM address. If an ATM address corresponding to the protocol address has not been registered in the ATM address table, the server transfers (broadcasts) the ATM address interrogation request to all terminals. The server notifies the originating terminal of an ATM address obtained by an answer in response to this interrogation request and registers the ATM address in the ATM address table.

15 Claims, 22 Drawing Sheets

